

**REMARKS**

After the foregoing amendment, claims 1-20 are currently pending in this application. Claim 18 has been amended to more distinctly claim subject matter which the applicant regards as the invention. No new matter has been introduced into the application by this amendment.

**Claim Rejections - 35 U.S.C. § 112**

Claim 20 stands rejected under 35 U.S.C. § 112 first paragraph, allegedly as failing to comply with the written description requirement. This rejection is respectfully traversed.

The Examiner contends that claim 20 disclosing “wherein the first and second members are rigid” does not appear to be supported by the original disclosure, noting that if the two members were rigid, it would appear to defeat the purpose of the original claimed invention, which allows the two members to move. However, claim 20 does not recite that the two members are rigidly connected, but rather that the two members themselves are individually rigid, and are connected by a bendable member (the bendable member recited in claim 1, from which claim 20 depends). An embodiment having two rigid members connected by a bendable member is shown, for example, in FIG. 3B. Thus, the elements of claim 20 are fully supported by the original disclosure. Reconsideration and withdrawal of the 35 U.S.C. § 112 rejection of claim 20 is respectfully requested.

**Claim Rejections - 35 U.S.C. § 102**

Claims 1,2, 4, 5, 8-10, 18, and 19 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Kambayashi *et al.* (US Patent No. 6,992,721, hereinafter “*Kambayashi*”). This rejection is respectfully traversed.

The claims are directed to a bending USB security token, and a bending USB adapter for use with a USB device, such as a rigid USB security token or other rigid device. As described on page 2 lines 9-21 of the application as filed, a rigid USB token inserted into a USB port of a computer could cause damage to one or both of the USB connecting elements (the male USB connector and/or the female USB port) if the user presses down on only one side of the token when it is inserted into a USB port. For example, a token that includes a biometric sensor for receiving an impression of a finger might cause such damage if the user applies pressure to only one side of the token. The claims provide a first member having a male USB connector, and a bendable member connecting the first member to a second member. The bendable member of the claims can prevent damage to the USB connectors by providing that, when the first member is inserted into a female USB connector (such as a USB port of a computer), pressure exerted on the second member will cause the second member to rotate with respect to the first member, thereby preventing excessive force from being transferred to the USB connector through the first member.

In contrast, *Kambayashi* recognizes a similar problem in a different context, and solves it in a completely different manner. *Kambayashi* recognizes that “[a] CCD camera [] may be likely to be broken by concentrated load of its own weight on a connector portion with the notebook PC when the notebook PC with the CCD camera is lifted. In this respect, conventional configurations for the CCD camera are not sufficient so as to prevent the connector portion such as a USB port from breaking while ensuring its connectivity with universal notebook PCs.” (Column 1 lines 60-67.) Thus, like the claimed invention, *Kambayashi* seeks to prevent damage to a USB connection caused by pressure on an inserted USB device, here pressure caused by a camera due to its unsupported weight. However, *Kambayashi* solves that problem by reinforcing

the USB connection with a required “reinforcing portion,” designed to provide additional support and rigidity to the USB connection. *Kambayashi*’s solution is to prevent bending. In stark contrast, the claimed invention allows bending of the USB connection by providing a bendable member that prevents applied pressure from being transmitted to the USB connection. Thus, *Kambayashi* provides for a rigid, reinforced USB connection, whereas the claimed invention eliminates the rigidity of the USB connection in favor of a bendable connection.

Regarding claim 1, the Examiner contends (in paragraph 11.a. of the Action) that if one were to rotate the movable portion of *Kambayashi* (224) along the “A” axis to a flat position, the movable portion (222) could then pivot along the “B” axis, thus positioning the joint in the first longitudinal axis, which reads on claim 1. However, this is incorrect. Claim 1 recites a first member for insertion into a USB port along a first longitudinal axis (i.e., the first longitudinal axis is a particular line in space, defined by the location of the USB port into which the first member is inserted, and the direction of insertion of the first member into the USB port through that location); and a bendable member disposed in the first longitudinal axis (i.e., the bendable member is placed on the line so defined). The bendable member is coupled to the first member and to a second member disposed on a second longitudinal axis, permitting the second member to rotate with respect to the first member. The bendable member is positioned in this way so that pressure applied to the second member cannot be transferred to the first member, but instead causes the second member to rotate with respect to the first member.

*Kambayashi* does not operate in the claimed manner. Furthermore, if one were to position in *Kambayashi* a bendable member in accordance with claim 1, it would render *Kambayashi* inoperative for its intended purpose. Although *Kambayashi* comprises hinge 214 and a pivot shaft (not shown) providing for rotation of its various parts in different directions,

neither the hinge nor the shaft is positioned as is the bendable member of claim 1. In addition, *Kambayashi* provides a required reinforcing portion 260 that “serves to prevent the connector 250 from breaking by application of moment of a force by the CCD camera 200.” (Column 6 lines 38-40.) The reinforcing portion is central to *Kambayashi*, and is required in all embodiments. Positioning a bendable member in accordance with claim 1 would make the reinforcing portion unnecessary, because the application of force to a USB connected device, such as force on the CCD camera of *Kambayashi*, would cause the camera to rotate with respect to the USB connector, and would not transfer the force to the USB connector. That would render *Kambayashi* inoperative for its intended purpose of providing extra rigidity to a USB connector, to prevent damage to the connector due to excessive force being transferred to it.

In addition, the Examiner contends that *Kambayashi* discloses a flexible token, as recited in claim 1. This is incorrect. As would be understood by one of ordinary skill in the art, a token is a device that is used to authenticate a computer user. For example, as described on [www.wikipedia.org](http://www.wikipedia.org), “A security token (or sometimes a hardware token, authentication token or cryptographic token) may be a physical device that an authorized user of computer services is given to aid in authentication... Hardware tokens are typically small enough to be carried in a pocket or purse and often are designed to attach to the user's keychain. Some may store cryptographic keys, such as a digital signature, or biometric data, such as a fingerprint.” ([http://en.wikipedia.org/wiki/Security\\_token](http://en.wikipedia.org/wiki/Security_token), viewed on 10/30/2007, partial copy attached). Thus for example, claim 1 recites “a flexible token” comprising a second member “having a processor providing conditional access to data stored in a memory.”

In contrast, *Kambayashi* is replete with references to a USB connected CCD camera, but does not contain even a single mention of a “token.” With respect to claim 10, the Examiner

notes that *Kambayashi* discloses fingerprint recognition devices (column 4 lines 17-18).

However, the fingerprint recognition devices are disclosed as examples of “image pickup” devices, along with digital still cameras, movie cameras, video cameras, and the like. Applicant respectfully submits that this isolated reference to a fingerprint recognition device does not disclose a security token. For example, a fingerprint recognition device might be used strictly for identification purposes and not for authentication purposes, such as to provide a digital fingerprint for later identification of a person, identify a suspected criminal, verify the identity of a patient, etc. *Kambayashi* does not disclose, suggest, or imply a token, as recited in claim 1, or that a fingerprint recognition device is part of a token.

Furthermore, the Examiner contends that because the second member of *Kambayashi* contains an image pickup portion, this implies that the second member contains a processor providing access to memory. Applicant respectfully disagrees. In fact, *Kambayashi* discloses that “an image captured through the lens 230 are [sic] transmitted by way of the USB connector 250 and a connector portion (not shown) in the notebook PC 100 to a information processing portion in the notebook PC 100.” (Column 6 lines 31-34, emphasis added.) Thus, *Kambayashi* discloses only that an image captured by the USB-connected CCD camera is transferred to a processing portion (i.e., a processor) in a notebook PC. Therefore, a member containing an image pickup portion does not imply that the member contains a processor, as recited in claim 1. Furthermore, even if it did, it would not imply that the processor provides conditional access to a memory, as recited in claim 1.

Because *Kambayashi* does not teach all of the features of claim 1, *Kambayashi* does not anticipate claim 1 under 35 USC § 102(e), and claim 1 is allowable over *Kambayashi*. Claim 18 is analogous to claim 1, and is allowable for the same reasons. Claims 2, 4, 5, and 8-10 depend

from claim 1, and claim 19 depends from claim 18. Therefore, without prejudice to their own individual merits, those claims are also allowable.

**Claim Rejections - 35 U.S.C. § 103**

Claims 3, 7, and 11-17, stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Kambayashi* (same as above). This rejection is respectfully traversed.

Claims 3 and 7 depend from claim 1. As noted above, *Kambayashi* provides a rigid USB connection, while claim 1 provides a bendable USB connection that would render *Kambayashi* inoperative for its intended purpose. Therefore, claim 1 cannot be obvious in view of *Kambayashi* under 35 USC § 103(a). Claims 3 and 7 depend from claim 1, therefore, without prejudice to their own individual merits, claims 3 and 7 are also not obvious over *Kambayashi*.

With regard to claim 11, to establish a *prima facie* case for obviousness under 35 USC § 103(a), it may be shown that the asserted references at least teach all of the elements of the examined claims. However, the Examiner admits that *Kambayashi* does not disclose a second member having a female USB-compliant connector. Therefore, claim 11 cannot be obvious under this standard.

Alternatively, it may be shown that “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains,” 35 U.S.C. § 103(a).

The Examiner contends claim 11 is obvious in view of *Kambayashi* in combination with “old and well known” art, taking official notice that it is well known in the electronic arts to use “adapters and extensions for changing the orientation of an electrical connector and or device,”

citing Eisenbraun (2002/0119708) for example. That may or may not be true, but it is not pertinent to the claimed invention. The claimed invention is not an adapter (such as for adapting one type of connector to a different type of connector), nor is it an extension (such as for extending the reach of a connector), nor is it for changing the orientation of an electrical connector, as suggested by the Examiner. Instead, the claimed invention is for “flexibly coupling” a security token to a host computer, so that a force applied to the token cannot be transferred to the computer. As disclosed on page 6 lines 15-16, “this embodiment is useful to prevent damage to [or from] a legacy (rigid) token 100 that does not incorporate the bending features described above.” Thus, the embodiment of claim 11 can prevent damage to USB connectors caused by pressure applied to a rigid device inserted into a USB port, and does not adapt, extend, or reorient the connection. Therefore, because the official notice taken is not applicable to claim 11, the embodiment claimed in claim 11 would not have been obvious over *Kambayashi* combined with the noticed information, as suggested by the Examiner.

In addition, applicant respectfully points out that the Examiner apparently has used Eisenbraun as an example of a device which would have been deemed obvious in view of “old and well known art.” However, Eisenbraun issued as patent number 6,551,142 on April 22, 2003. Therefore, Eisenbraun was presumptively *not* obvious in view of “old and well known art.” Furthermore, it is respectfully pointed out that Eisenbraun is from a different field than the claimed invention. It is unlikely that one of skill in the art of providing USB tokens for use with computers would have looked to a car cigarette lighter-based plural socket power adapter for a method of preventing damage to USB connectors.

For at least the reasons presented above, claim 11 is allowable over *Kambayashi*. Claims 16 and 17 are analogous to claim 11, and are deemed allowable for at least the same reasons.

Claims 12-15 depend from claim 11. Therefore, without prejudice to their individual merits, those claims are also deemed allowable for the same reasons.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Kambayashi* (same as above) in view of Krietzman *et al.* (US Patent Pub 2001/0043468, hereinafter "*Krietzman*"). This rejection is respectfully traversed.

As noted above, *Kambayashi* provides a rigid USB connection, while claim 1 provides a bendable USB connection that would render *Kambayashi* inoperative for its intended purpose. Therefore, claim 1 cannot be obvious in view of *Kambayashi* under 35 USC § 103. Claim 6 depends from claim 1, therefore, without prejudice to its own individual merits, claim 6 is also not obvious over *Kambayashi*.

In addition, claim 1 is deemed allowable over *Kambayashi* for the reasons presented above in connection with 35 USC § 102(e), because claim 1 contains features not provided by *Kambayashi*. *Krietzman* does not supplement *Kambayashi* to provide all of the features of claim 1. Therefore, claim 1 is deemed allowable over *Kambayashi* and *Krietzman* combined. Claim 6 depends from claim 1, therefore, claim 6 is also deemed allowable over *Kambayashi* and *Krietzman* combined.

Based on the arguments presented above, reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejections of claims 3, 6, 7, and 11-17 are respectfully requested.

### **Conclusion**

In view of the foregoing amendment and remarks, Applicant respectfully submit that the present application, including claims 1-20, is in condition for allowance and an early notice of allowance is respectfully requested.

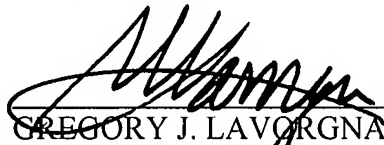


If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

Respectfully submitted,

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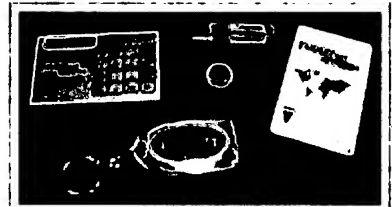
# Security token

From Wikipedia, the free encyclopedia

A **security token** (or sometimes a **hardware token**, **authentication token** or **cryptographic token**<sup>[1]</sup>

([http://en.wikipedia.org/wiki/Security\\_token#endnote\\_notePKCS](http://en.wikipedia.org/wiki/Security_token#endnote_notePKCS)) may be a physical device that an authorized user of computer services is given to aid in authentication. The term may also refer to software tokens.

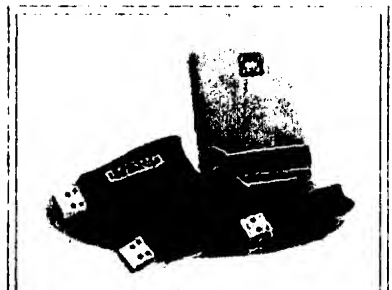
Hardware tokens are typically small enough to be carried in a pocket or purse and often are designed to attach to the user's keychain. Some may store cryptographic keys, such as a digital signature, or biometric data, such as a fingerprint. Some designs feature tamper resistant packaging, other may include small keypads to allow entry of a PIN.



Several types of security tokens.



SecurID tokens from RSA Security.



eToken tokens from Aladdin Knowledge Systems



Entrust IdentityGuard Mini Token from Entrust